

Review of Temporary Gas Storage and Transportation product, ItzaGasCan.

ItzaGasCan is a cardboard box with a plastic lining used as a gasoline container that the parent company L&W Innovations, LLC is marketing and selling as a one time use emergency portable gas can. L&W Innovations, LLC describes, at great length, the issues they believe make this portable gas can concept safe and reliable for anyone in the general public.

The construction of ItzaGasCan is as follows; the exterior is a cardboard box that is collapsible with manual interlocking joints, the interior is a plastic bladder that is double walled with a total thickness of 6 mil. The inner bladder is made of polyethylene and the outer is made of nylon laminate. The spout is sealed into the plastic bladder. The interior bladder and exterior cardboard shell come pre-attached, with only the completion of assembling the shell required for use.

L&W Innovations, LLC submitted the product, ItzaGasCan, to the Packaging Development Service Inc. to conduct pre-shipment testing in accordance with UN Standards for Performance-Oriented Packaging (POP), 49 CFR. Packaging Development Service Inc. is an UN, DOT and NSTA Certified Laboratory located in Broomfield, CO. The testing information as provided for ItzaGasCan appears to be only for the structural integrity of the container itself. The test does reference the intent of the contents for this container as

“The hazardous material that this package is intended to carry is classified as Gasoline, UN 1203, Hazard Class 3, Packing Group II.”

The tests conducted were; vibration, shock, compression and Cobb test. The product passed all tests collectively, with one note of follow up testing regarding the drop test. In this evolution, the product dispensed liquid during the corner drop test. The lab report describes it as *“a momentary splash came out of the container”*. The lab report states the follow up testing involved holding the container upside down after the drop to determine if any further leaking would occur. No further leakage was noted in the report. The report further states that no evidence of weakening or compromised integrity of the inner bag was noted, so the assumption is the momentary splash came from the spout since the report is not clear on this issue. Nor does the report define or measure how much in volume or quantity the “splash” that escaped the container consisted of.

In the summary of the report, the lab concluded the packaging based on design met the requirements to pass the testing process, but went on to document concerns regarding how the container should not be used. The underlying concern is that a container with gasoline in it would be left unattended and thus implied would create a hazardous and or dangerous situation. This concern is further detailed in the summary by the statement

“Should the packages be dropped and a leak/spill develop, it is believed that the individual would immediately replace the cap on the spout tube and orient the container so as to stop the leak/spill”

This implication shows that leak and spillage from this container appears to be a high concern by the lab and could also be an issue in disposal of the container as discussed later on.

In researching the concept of a “disposable” temporary gas can, NFPA 30 Chapter 6 Container and Portable Tank Storage was reviewed and consulted. NFPA 30 6.2.3 is the only reference to a Bag-in-Box non-bulk type gas container. NFPA reference to this type of container is **NOT PERMITTED**. Also reviewed was ASTM F 852 Standard for Portable Gasoline Containers for Consumer Use. The ASTM standard specifically does not cover single-trip prepackaged containers and makes no reference that it has researched, tested or addressed this issue.

Upon further review of the product ItzaGasCan, the NH Fire Marshal’s Office did a non scientific burn test of an assembled product. Combustion of the cardboard was immediate and failure of the bladder did occur caused by the fire. The liquid used in the container was water.

On a more practical point, L&W Innovations attempts to describe on its website the fact that its product, ItzaGasCan, is safer than standard cans. In reading its page length of claims, the underlying safety claim is two fold, a statement of no measurable build of static electricity and the convenience of the product. L&W Innovations states;

“We have been able to measure NO measurable static build up when filling the ItzaGasCan or when the ItzaGasCan slides on a plastic truck liner.”

No scientific testing information has been provided or indicated every being done to confirm these claims as to static electricity.

L&W Innovations even goes to length of trying to sell the idea that *“the standard cans are simply more dangerous.”* This is done by describing how humans are inclined to make mistakes and even though their product could be used inappropriately, the company has done all it can to prevent improper use by placing markings that *“strictly prohibit storage of fuel”* and that *“We can only do what we can to clearly convey proper use to the 99.5% of the people that do the right thing”*. They try to indicate that should someone store fuel long term in their product the only malfunction that may occur is the black tip will fall off the nozzle and vent vapors to the atmosphere with a temperature increase. There is no documentation at what temperature ItzaGasCan will vent at. They do state that a standard gas can will build up pressure from a temperature change to as much as 60 kPa, but fails to state that these standard gas cans are required to have one or more devices installed for emergency venting and one of the vents shall vent at not less than 35 kPa (as referenced in NFPA 30 6.2.2). L&W Innovations not only misleads the potential customer, they do not use accurate information in there documentation.

Further, the assumption of safety in their product has another issue, disposal. These containers will be disposed of in any general waste receptacle at any location a user can find. This statement from ItzaGasCan website supports this view point when they state;

“The one-time feature gives stranded motorists permission to discard the empty container after use.....The motorists use the can, return to the gas station to fill up and discard the empty.”

This creates an obvious fire hazard to the general public because due regard for proper disposal will not be taken by the general public. Gasoline product and vapor will still remain in the container, making it a highly volatile fuel source that is just waiting for the introduction of an ignition source. To further show how this product and an ignition source could come together, there are still many garbage cans in use throughout the Nation that have a cigarette disposal tops on them. Should someone discard an ItzaGasCan in the trash section that still contained fuel and or vapors and another person comes along to dispose of a lit smoking item, the combination could be extremely hazardous to property and health.

On a procedural point, L&W Innovations began selling their product ItzaGasCan in the State of New Hampshire in violation of NH RSA 153:16-a. On their website under a paragraph titled Fire Marshal, L&W Innovations states;

“It is our understanding that certifying to US DOT performance standards makes the ItzaGasCan compliant with all state Fire Marshal requirements. We have not contacted Fire Marshals in each state, but those contacted have confirmed compliance.”

There is NO list of the State Fire Marshal Offices L&W Innovations has contacted, nor which State Fire Marshal Offices have approved the use of their product. It is clear they have not contacted the New Hampshire State Fire Marshal Office to receive approval to sell or offer to sell their container in New Hampshire. NH RSA 153:16-a states;

No person shall sell or offer for sale any plastic container designed or intended for the storage of gasoline or other flammable liquids unless such container conforms to existing federal standards **AND** has been approved by the state fire marshal. Any person violating the provisions of this section shall be guilty of a violation if a natural person, or guilty of a misdemeanor if any other person.

It is clear that L&W Innovations, LLC is in direct violation of this law, as stated on their website, with their failure to contact the Fire Marshal's Office to receive approval of their product.

In conclusion, the New Hampshire State Fire Marshal's Office does not find this product to be a safe alternative for the general public to be used in the storage, transportation and

distribution of gasoline. This product is not approved by this office and all sales and distribution of it shall stop immediately within the State. Anyone found to be selling or offering to sell this product may be cited and fined as according to law.

Review completed by

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